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## **New and interesting Portuguese Lepidoptera records from 2011 (Insecta: Lepidoptera)**

**M. F. V. Corley, T. Merckx, J. P. Cardoso, M. J. Dale, E. Marabuto, E. Maravalhas & P. Pires**

### **Abstract**

47 species are added to the Portuguese Lepidoptera fauna and four species deleted, mainly as a result of fieldwork undertaken by the authors in 2011. In addition, second and third records for the country and new food-plant data for a number of species are included. A summary of papers mainly published in 2011 affecting the Portuguese fauna is included.

KEY WORDS: Insecta, Lepidoptera, distribution, Portugal.

### **Novos e interessantes registos portugueses de Lepidoptera de 2011 (Insecta: Lepidoptera)**

### **Resumo**

Como resultado do trabalho de campo desenvolvido pelos autores principalmente no ano de 2011, são adicionadas 47 espécies de Lepidoptera para a fauna de Portugal e quatro são retiradas. Adicionalmente, são apresentados segundos e terceiros registos de espécies previamente conhecidas além de novas plantas alimentícias para algumas outras espécies. Finalmente, é apresentado um sumário dos trabalhos relevantes para a fauna portuguesa publicados no ano de 2011.

PALAVRAS CHAVE: Insecta, Lepidoptera, distribuição geográfica, Portugal.

### **Nuevas e interesantes citas portuguesas de Lepidoptera del 2011 (Insecta: Lepidoptera)**

### **Resumen**

Con el trabajo de campo efectuado por los autores principalmente durante el año de 2011, se añaden 47 especies de Lepidoptera a la fauna de Portugal y se eliminan cuatro especies. Adicionalmente se presentan segundos y terceros registros de especies ya conocidas del país y también nuevas plantas nutricias de algunas otras especies. Finalmente presentamos un resumen de los trabajos publicados en 2011 que son relevantes para la fauna portuguesa.

PALABRAS CLAVE: Insecta, Lepidoptera, distribución geográfica, Portugal.

### **Introduction**

This paper gives records of species of Lepidoptera added to the Portuguese fauna in 2011, with additional data including second and third records of species and sometimes further records, either

recent or older, where we consider that a species has been neglected, together with significant extensions of range within Portugal and new data on larval food-plants within the country. Also in this paper a number of species are included for which the originally published records are erroneous or have not proved possible to confirm and we therefore provide a recent confirmed record.

Finally, papers and books mainly published in 2011 that relate to the Portuguese Lepidoptera fauna are listed and briefly summarised.

The paper follows the format established in CORLEY *et al.* (2008). It is the sixth in the series of annual summaries of new knowledge of Portuguese Lepidoptera.

47 species new for Portugal are listed below, of which four are also new to the Iberian Peninsula. Nine of these species, marked (\*) have been previously listed for Portugal, but the listing was without data, or the records are erroneous or unsubstantiated. Four species are deleted from the Portuguese fauna. With these additions two families of Lepidoptera, Roeslerstammiidae and Castniidae, are added to those previously known from Portugal.

As a result of these changes including five additions in the literature, the total number of Lepidoptera species currently recognised from Portugal is increased by 48 to 2558.

The 2011 records include a number of new species for Portugal from Serra da Peneda. Thomas Merckx has continued his work in this area during 2012 and a paper on the Lepidoptera fauna of the area is planned. Therefore only species new for Portugal are included here, while other interesting records will be in the proposed paper.

## Material and Methods

Most species were captured at mercury vapour light over or beside a white sheet or in combination with a trap, apart from Thomas Merckx's records which were obtained from 'Heath' traps using 6 watt actinic lights. Where this was not the case, the means of capture is given. Specimens are retained in the collections of the original recorders, unless otherwise stated.

A few older records of overlooked or previously unconfirmed species are also included. We are finding that many species that are not particularly rare have only one or two published records. When we have a recent record for such a species, we have taken the opportunity to add several additional records, if these are available.

The order and nomenclature of families and species follows KARSHOLT & RAZOWSKI (1996) with a number of nomenclatural modifications reflecting later works. Recently there have been major changes in the classification of Lepidoptera which have been adopted in Fauna Europaea (KARSHOLT & NIEUKERKEN, 2011). A completely revised list of Portuguese Lepidoptera is in preparation and this will follow the new classification, but until this is published, the familiar order continues to be used here. The nomenclature of plant names follows CASTROVIEJO (1986-2012) where possible and otherwise follows TUTIN *et al.* (1964-1980).

The entry for species new for Portugal concludes with a summary of the known European distribution, and available information on the larval food-plant, given in square brackets if the information comes from outside Portugal.

## Localities with UTM squares and altitude: (District in brackets)

The map below shows the 10x10 km UTM grid squares from which records cited in this paper were made.

Abreiro station (Vila Flor), Tua valley	PF4478	170 m
Albergaria, (Manteigas), Serra da Estrela	PE2165	1500 m
Amieiro, Tua valley (Alijó)	PF3471	150 m
Almaceda (Castelo Branco)	PE1429	340 m
Alportel, 2 km N. of (São Brás de Alportel)	NB9617	380 m

Assentiz (Rio Maior)	ND1145	110 m
Assureira, Castro Laboreiro (Melgaço)	NG6950	780 m
Barragem da Serra Serrada (Bragança), Serra de Montesinho	PG8348	1300 m
Barreiro, Castro Laboreiro (Melgaço)	NG6851	810 m
Bertiandos, 1 km W. of (Ponte de Lima)	NG2923	6 m
Bezerra (Porto de Mós)	ND1378	400 m
Boliqueime (Loulé)	NB7510	70 m
Brunheda (Carrazeda de Ansiães)	PF3776	160 m
Cabanas Velhas, W. of Budens (Vila do Bispo)	NB1802	70 m
Cabeção (Mora)	ND8012	125 m
Cabeças, Castro Laboreiro (Melgaço)	NG6951	850 m
Cabo de São Vicente (Vila do Bispo)	NA0198	75 m
Caldas de Manteigas (Manteigas)	PE2371	850 m
Campo do Gerês, 5 km. S. of (Terras de Bouro)	NG6519	450 m
Campo Grande (Lisboa)	MC8689	80 m
Cântaro Raso, (Manteigas), Serra da Estrela	PE1964	1710 m
Carvalhelhos, Serra do Barroso (Boticas)	PG0516	800 m
Carvalho de Rei, Serra do Marão (Amarante)	NF8264	500 m
Castelo Novo (Fundão)	PE2739	865 m
Castro Laboreiro (Melgaço)	NG6954	970 m
Ceira (Coimbra)	NE5247	100 m
Colado, 2 km SW of Soeira (Vinhais)	PG7134	680 m
Cortinas (Porto de Mós)	ND1784	195 m
Costa da Cabrita, Castro Laboreiro (Melgaço)	NG7055	1100 m
Covão da Ametade (Manteigas), Serra da Estrela	PE1965	1420 m
Covão da Ponte (Manteigas), Serra da Estrela	PE2678	980 m
Covão do Boi, (Manteigas), Serra da Estrela	PE1864	1850 m
Cruzinha, Mexilhoeira Grande (Portimão)	NB3411	20 m
Esculca, Beça (Boticas), Serra do Barroso	PG0815	790 m
Escusa (Marvão)	PD3762	550 m
Faro	NA99	5 m
Foia, 1 km north of summit (Monchique)	NB3630	800 m
Fonte de Apra (Loulé)	NB9212	250 m
Forte de Belixe (Vila do Bispo)	NA0198	50 m
Fresulfe (Vinhais)	PG7140	650 m
Gaia (Belmonte)	PE4174	490 m
Galegos (Marvão)	PD4461	470 m
Gerês (Terras de Bouro)	NG7020	440 m
Gondesende (Bragança)	PG7734	790 m
Ilha da Culatra (Faro)	PA0395	4 m
Lagoa da Nave (Loulé)	NB8520	230 m
Lama Grande (Bragança), Serra de Montesinho	PG8346	1390 m
Lamas de Olo (Vila Real)	NF9981	970 m
Lidador, Moreira (Maia)	NF2866	90 m
Ludo (Faro)	NA9099	10 m
Malhada da Figueira, north of Santa Rita (Tavira)	PB2619	125 m
Marco, Esperança (Arronches)	PD5838	375 m
Mata do Buçaco (Mealhada)	NE5370	270 m
Minhota (Marvão)	PD3863	650 m
Moimenta (Vinhais)	PG6746	900 m
Mondeguinho (Gouveia)	PE1974	1420 m
Montalegre	PG0031	950 m
Monteteso (Oliveira de Frades)	NE7094	850 m
Monte Velho (Santiago de Cacém)	NC1613	10 m
Montouto (Vinhais)	PG6643	1010 m

Panchorra (Resende)	NF8640	1030 m
Parâmio (Vinhais)	PG7740	860 m
Parque Biológico de Gaia (Vila Nova de Gaia)	NF3650	110 m
Penhas Douradas (Manteigas), Serra da Estrela	PE2175	1450 m
Picota (Monchique)	NB4129	770 m
Poço do Inferno, Serra da Estrela (Manteigas)	PE2570	1100 m
Podre, Castro Laboreiro (Melgaço)	NG6850	800 m
Poio do Judeu, (Manteigas), Serra da Estrela	PE2064	1600 m
Ponte de Cabaços (Seia), Serra da Estrela	PE1875	1340 m
Ponte de Castrelos (Bragança)	PG7433	640 m
Ponte de Parâmio (Vinhais)	PG7840	770 m
Ponte Nova, Assureira, Castro Laboreiro (Melgaço)	NG6950	750 m
Portela do Arão (Seia)	PE0966	970 m
Portela, Castro Laboreiro (Melgaço)	NG7156	1140 m
Portela do Homem, Serra do Gerês (Terras de Bouro)	NG7229	820 m
Prado Novo, 4 km west of França (Bragança)	PG8441	820 m
Praia da Luz (Lagos)	NB2404	10 m
Quinta da Taberna (Guarda)	PE3382	800 m
Quinta da Volta, Trinta (Guarda)	PE3885	740 m
Ramisqueira, Castro Laboreiro (Melgaço)	NG6951	800 m
Ribeira de Cortes (Covilhã)	PE2462	1293 m
Ribeira de Limas (Serpa)	PB2187	85 m
Rodeiro, Castro Laboreiro (Melgaço)	NG7055	1100 m
Santa Luzia (Tavira)	PB2007	3 m
São Bento (Porto de Mós)	ND1875	500 m
São Lourenço (Carrazeda de Ansiães)	PF3672	160 m
São Miguel, Serra de Monte Figo (Olhão)	PB0406	360 m
São Romão (São Bras de Alportel)	NB9412	200 m
Sapaís de Castro Marim (Castro Marim)	PB3820	4 m
Serra da Chugueira, Hortas de Baixo (Arronches)	PD5936	320 m
Serra da Lousã (Lousã)	NE6635	880 m
Serra da Marofa (Figueira Castelo Rodrigo)	PF6926	745 m
Serra da Nogueira (Bragança)	PG7724	1125 m
Serra da Pevide (Porto de Mós)	ND1483	210 m
Serra de Castelo de Vide (Castelo de Vide)	PD3363	700 m
Serra de Monfurado (Montemor-o-Novo)	NC7069	360 m
Serra de Montejunto (Cadaval)	MD9737	270 m
Serra de Portel (Portel)	PC1444	260 m
Serra do Larouco (Montalegre)	PG0636	1300 m
Serro Ventoso (Porto de Mós)	ND1479	230 m
Singeverga (Santo Tirso)	NF5277	200 m
Trinta, by R. Mondego, Serra da Estrela (Guarda)	PE3785	750 m
Valado, Nespereira (Cinfães)	NF7140	500 m
Vale da Lapa, S.E. of Ferragudo (Lagoa)	NB4406	40 m
Vilarinho das Azenhas (Vila Flor)	PF5083	190 m
Vilarinho, Espinhosela (Bragança)	PG7940	790 m
Zambujeira do Mar (Odemira)	NB1853	20 m

## Recorders

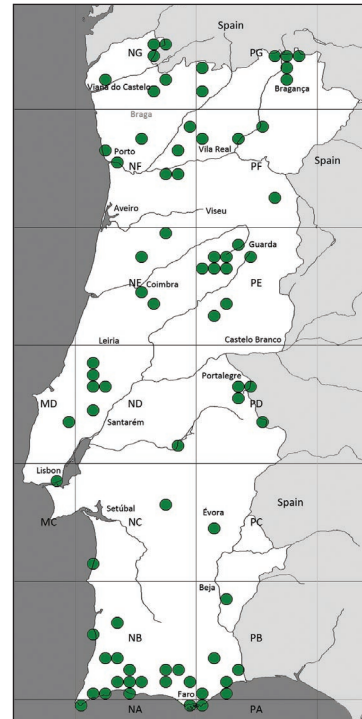
Bert Van der Auwermeulen; Jérôme Barbut; Rolf Bläsius; João Pedro Cardoso; Martin F. V. Corley; Manuel Dinis Cortes; Michael J. Dale; Sónia Ferreira; Carlos Franquinho; Barry Goater; H. Hendriksen; Ole Karsholt; T. Lambe; Ales Laštůvka; Zdenek Laštůvka; Eduardo Marabuto; Ernestino Maravalhas; Thomas Merckx; Nicholas Montegriffo; Teodoro Monteiro; Tatiana Moreira; Erik van Nieukerken; Pedro Pires; Ivo Rodrigues; Fernando Romão; Pedro Sousa.

**Abbreviations and symbols:**

coll.	collection
comm.	communicated by
conf.	confirmed by
det.	determined by
IZPC	Natural History Museum of the Sciences Faculty of Porto
ZMUC	University of Copenhagen Zoological Museum, Copenhagen, Denmark
*	New for Portugal
**	New for the Iberian Peninsula
(*)	New for Portugal, but has previously been listed erroneously or questionably.

**Provinces:**

AAL	Alto Alentejo	ALG	Algarve
BA	Beira Alta	BAL	Baixo Alentejo
BB	Beira Baixa	BL	Beira Litoral
DL	Douro Litoral	E	Estremadura
M	Minho	R	Ribatejo
TM	Trás-os-Montes		

**List of families and species****ERIOCRANIIDAE***Eriocrania subpurpurella* (Haworth, 1828)

Third to fifth Portuguese records. M: Gerês, 12-V-2009, Corley; DL: Parque Biológico de Gaia, 23-III-2011, Corley; AAL: Serra de Monfurado, 31-III-2011, Marabuto. Previously recorded from Beira Baixa (MENDES, 1913) and Beira Litoral (PIRES & CORLEY, 2007).

**OPOSTEGIDAE***Pseudopostega chalcopepla* (Walsingham, 1908)

Second and third Portuguese records. BAL: Monte Velho, 18-III-2011, Corley; E: Serra de Montejunto, 14-IV-2011, Pires and Marabuto, det. Corley. Previously recorded from Ribatejo (LAŠTŮVKA & LAŠTŮVKA, 2008).

**ADELIDAE**\* *Nemophora albiciliellus* (Staudinger, 1859)

M: Costa da Cabrita, flying by day, 28-VII-2011, Corley and Merckx. This species was long considered a synonym of *N. barbatellus*, but shown to be distinct by KOZLOV (2004). Spain. Larva unknown.

**TINEIDAE**\* *Infurcitinea peterseni* Baldizzzone, 1984

BA: Covão do Boi, 3-VIII-2011, Corley, Moreira, Pires and Romão. Spain (Sierra Nevada). Larva unknown.

*Monopis crocicapitella* (Clemens, 1859)

Fourth Portuguese record. ALG: Cabanas Velhas, 10-VI-2011, Van der Auwermeulen, det. Corley. Previously recorded from Setúbal (VIEILLEDENT, 1905), Trás-os-Montes (AMSEL, 1959) and Beira Litoral (PIRES & CORLEY, 2007).

*Opogona omoscopia* (Meyrick, 1893)

Additional records. E: Serra da Pevide, 28-IX-2008, Corley, Marabuto and Pires; DL: Parque Biológico de Gaia, 5-X-2008, 20-XI-2009, Corley; BAL: Zambujeira do Mar, 31-VII-2011, Pires. A recent arrival in Portugal, first recorded in Algarve in 2002 (CORLEY, 2005), with subsequent records from Beira Litoral (PIRES & CORLEY, 2007) and from other sites in Estremadura and Beira Litoral (CORLEY *et al.*, 2008).

PSYCHIDAE

(\*) *Ptilocephala malvinella* (Millière, 1858)

ALG: Vale da Lapa, 25-II-2001, Bläsius. Listed for Portugal by SOBSZYK (2011) based on this previously unpublished record. Spain. There is no information on larval feeding.

ROESLERSTAMMIIDAE

\*\* *Roeslerstammia erxlebelli* (Fabricius, 1787)

M: Podre, 26-VII-2011, Corley and Merckx. Middle latitudes of Europe, Scandinavia, Sardinia. [Larva on *Tilia* and *Betula*].

BUCCULATRICIDAE

*Bucculatrix alaternella* Constant, 1890

Third and fourth Portuguese records. ALG: Fonte de Apra, 16-III-1996 and São Romão, 12-III-2011, larvae on *Rhamnus alaterni*, Corley. Previously recorded from Estremadura (CORLEY *et al.*, 2006) and Beira Baixa (CORLEY *et al.*, 2008).

GRACILLARIIDAE

*Phyllonorycter corylifoliella* (Hübner, 1796)

Third and fourth Portuguese records. AAL: Marco, mines on *Crataegus*, 28-IX-1999, Corley; TM: Barragem da Serra Serrada, mines on *Sorbus aucuparia* and *Betula*, 9-IX-2002, Corley. Previously recorded from Estremadura (MENDES, 1910a) and Beira Baixa (MENDES, 1913).

*Phyllonorycter genistella* (Rebel, 1901)

Third Portuguese locality. TM: Parâmio, larvae mining leaves of *Genista florida*, 22-III-2011, Corley. Previously recorded from two localities in Serra da Estrela (LAŠTŮVKA & LAŠTŮVKA, 2006).

YPONOMEUTIDAE

\* *Yponomeuta sedella* Treitschke, 1832

TM: Gondesende, 30-VII-2011, Corley. Most of Europe, except southernmost parts of Balkan Peninsula and most Mediterranean islands. [Larva on *Sedum*].

\* *Ocnerostoma friesei* Svensson, 1966

BA: Albergaria, 5-VIII-2011, Corley. Western and Northern Europe to Austria, Slovakia and parts of Russia. [Larva on *Pinus*].

*Argyresthia pruniella* (Clerck, 1759)

Second Portuguese record. TM: Prado Novo, 1-VIII-2011, Corley. Previously recorded from Douro Litoral (CORLEY, 2008).

## ACROLEPIIDAE

**\*\*** *Digitivalva arnicella* (Heyden, 1863)

M: Costa da Cabrita, flying by day, 28-VIII-2011, Corley. Middle latitudes of Europe, extending from France north to Norway and Sweden and east to Lithuania and Hungary, absent from a number of countries within this area. [Larva mining leaves of *Arnica montana*].

## LYONETIIDAE

*Leucoptera lotella* (Stainton, 1859)

Listed for Portugal in MEY (1994) and VIVES MORENO (1995) without data. Record based on BA: Penhas Douradas, Serra da Estrela, 12-VII-1986, Karsholt (ZMUC) (comm. W. Mey). Additional record: BA: Portelo do Arão, larvae mining *Lotus uliginosus*, 6-IX-2001, Corley. Previous published record from Algarve (CORLEY, 2005).

## ETHMIIIDAE

**(\*)** *Ethmia candidella* (Alphéraky, 1908)

AAL: Serra de Castelo de Vide, resting on tree trunk, 26-IX-1998; at light, 29-IX-1999, Corley. MENDES (1904; 1910b) reported *pusiella* (Linnaeus, 1758) in April, June and September from Beira Baixa and Estremadura. SATTTLER (1967), without having seen Mendes' specimens, speculated that the September records would have been *E. candidella* and the April records *E. fumidella* (Wocke, 1850). Based on Sattler's suggestions, *candidella* and *fumidella* but not *pusiella*, were listed as present in Portugal by VIVES MORENO (1992), but this was not based on examination of specimens. Southern Europe and the warmer parts of Central Europe, north to Czech Republic and Slovakia, not on Mediterranean islands. [Larva on *Lithospermum*, *Borago*, *Asperugo*, *Aegonychon* and *Cerinth*].

## DEPRESSARIIDAE

*Agonopterix chironiella* (Constant, 1893)

ALG: São Miguel, larvae on *Foeniculum vulgare*, 13-III-2011, Corley.

**\*** *Depressaria pimpinellae* Zeller, 1839

BL: Serra da Lousã, 1-X-2005 Corley & Pires; TM: Vilarinho, larvae on *Pimpinella villosa*, 13-V-2007, Corley. Both previously misidentified as *D. libanotidella*, see below. Middle latitudes of Europe, north to central Fennoscandia and south to Spain and Romania.

Delete *Depressaria libanotidella* Schläger, 1849

Records from BL: Serra da Lousã, 1-X-2005 Corley & Pires (CORLEY *et al.*, 2006) and TM: Vilarinho, larvae on *Seseli tortuosum*, 13-V-2007, Corley (CORLEY *et al.*, 2008) have been re-examined following DNA barcoding of a specimen from the second locality and found to be *D. pimpinellae*. The foodplant was also misidentified, see above under *D. pimpinellae*.

## SCYTHRIDIDAE

*Scythris ericivorella* (Ragonot, 1881)

Second Portuguese record. TM: Barragem da Serra Serrada, larvae on *Erica arborea*, 22-III-2011,



Corley. BENGTTSSON (1997) mentions a specimen from Coimbra, in Budapest but without any other data.

*Scythris salviella* Meess, 1910

ALG: Cabo de São Vicente, larvae on *Stauracanthus spectabilis*, 14-III-2011, Corley. Previously recorded from this locality (CARVALHO & CORLEY, 1995) but foodplant erroneously given as *Ulex argenteus*.

*Scythris insulella* (Staudinger, 1859)

Second Portuguese record. TM: Montouto, 27-VII-2001, Nieukerken, det. Bengtsson. Previously listed without data by BENGTTSSON (1997) based on a specimen labelled 'Porto' without date or collector in Museum Wien (Bengtsson *in litt.*).

\* *Scythris xanthopygella* (Staudinger, 1859) (Fig. 1)

ALG: Sapais de Castro Marim, larva on *Salsola vermiculata*, 12-III-2011, Corley. Spain. The larval foodplant was previously unknown.

## OECOPHORIDAE

*Epicallima mercedella* (Staudinger, 1859)

Additional records. TM: São Lourenço, 20-VII-2006, Corley; Prado Novo, 1-VIII-2011, Corley; BB: Ribeira de Cortes, 23-VII-2008, S. Ferreira and P. Sousa, det. Corley. Previously listed without data in VIVES MORENO (1992) and recorded from Algarve (CARVALHO & CORLEY, 1995; CORLEY *et al.*, 2000) and from Beira Baixa (MARABUTO *et al.*, 2012).

\* *Harpella forficella* (Scopoli, 1763)

M: Podre, 26-VII-2011, Corley and Merckx. Almost throughout Europe, but rare in south and absent from Mediterranean islands. [Larva on dead wood].

## COLEOPHORIDAE

\*\* *Coleophora potentillae* Elisha, 1885

M: Assureira, 27-VII-2011, Corley. Northern and western Europe from France to Czech Republic and Estonia. [Larva on various herbaceous and shrubby Rosaceae including *Potentilla*, *Geum*, *Filipendula*, *Agrimonia*, *Fragaria*, *Rosa* and *Rubus*; also recorded from *Helianthemum*, *Salix* and *Betula*.]

*Coleophora serinipennella* Christoph, 1872

Second Portuguese record. ALG: Cabanas Velhas, 21-VI-2011, Van der Auwermeulen, det. Corley. Previously recorded from south-east Algarve (CORLEY *et al.*, 2000).

*Coleophora acrisella* Millière, 1872

Extension of range. TM: Colado, larvae on *Dorycnium pentaphyllum*, 22-III-2011, Corley. Previously reported from several localities in Algarve (CORLEY *et al.*, 2000; CORLEY, 2005).

\* *Coleophora serpylletorum* E. Hering, 1889

TM: Gondesende, 30-VII-2011, Corley. South and middle latitudes of Europe, north to England, Denmark and Lithuania; absent from several countries and Mediterranean islands. [*Thymus*].

Delete *Coleophora pyrrhulipennella* Zeller, 1839

It has recently been found (BALDIZZONE & LANDRY, 2011) that *C. pyrrhulipennella* has a sister species, *C. pulchripennella*, found in southern Europe. Some Portuguese records of *pyrrhulipennella* have

been checked (by Baldizzone or Corley) and found to belong to the new species, but it has not been possible to re-examine the majority of Portuguese records. According to Baldizzone (pers. comm.) *C. pyrrhulipennella* has not been found south of the Alps. However all Spanish records are from the south and east, so the possibility that it might occur in northern Portugal cannot yet be completely excluded.

\* *Coleophora pulchripennella* Baldizzone, 2011

ALG: Ludo, 16-IX-1994, Corley; Picota, 17-IX-1994; Alportel, 6-VI-1997, all in CORLEY *et al.*, (2000) as *pyrrhulipennella*; DL: Parque Biológico de Gaia, 9-V-2008, Corley; BA: Quinta da Taberna, 28-VI-2008, Pires and Marabuto; Covão da Ponte, 11-VII-2009, Corley and Pires. South-west Europe, Italy, Croatia, Greece, Crete and Malta. [*Erica arborea*].

\* *Coleophora virgaureae* Stainton, 1857

M: Assureira, larvae on *Solidago virgaurea*, VII-2011, Corley. North and middle latitudes of Europe; absent from the south-east and Mediterranean islands.

## COSMOPTERIGIDAE

*Pyroderces wolschrijni* Koster & Sinev, 2003

Second Portuguese record. ALG: Boliqueime, 27-IX-2009, 3-X-2009, Dale. Previously recorded from Lisboa (CORLEY *et al.*, 2007).

\* *Anatrachyntis badia* (Hodges, 1962)

ALG: Boliqueime, 27-IV-2011, Dale. Spain, Italy, Sicily, Malta and Greece. Also recorded from Britain as an adventive. [Larva polyphagous, recorded on fruits including various Citrus and Bananas, also on leaves of *Ulmus* and damaged pine cones].

## GELECHIIDAE

\* *Aristotelia decurtella* (Hübner, 1813)

TM: Gondesende, 30-VII-2011, Corley. Middle latitudes of Europe from France to Balkan Peninsula and Russia. [Larva on *Rosa pimpinellifolia*, *Sanguisorba* and *Eryngium campestre*].

\* *Metzneria diffusella* Englert, 1974

TM: Gondesende, 30-VII-2011, Corley. Southern Europe, not on Mediterranean islands. Larva unknown.

\* *Teleiodes sequax* (Haworth, 1828)

M: Ponte Nova, 27-VII-2011, Corley. Nearly all Europe including Britain but absent from parts of the north-west and the Mediterranean islands. [Larva on *Helianthemum*].

*Carpatolechchia alburnella* (Zeller, 1839)

Second Portuguese record. TM: Lama Grande, 31-VII-2011, Corley. Previously recorded from nearby Montouto (CORLEY *et al.*, 2006).

\* *Gelechia sororculella* (Hübner, 1817)

M: Ponte Nova, 27-VII-2011, Corley. Almost all Europe except some Balkan countries and Mediterranean islands. [Larva on *Salix*].

\* *Chionodes fumatella* (Douglas, 1850)

TM: Lama Grande, 31-VII-2011, Corley. Almost all Europe except some Balkan countries and Mediterranean islands. [Larva on mosses].

*Scrobipalpa niveifascies* Povolný, 1977

Fourth Portuguese locality. ALG: Santa Luzia, larvae on *Atriplex halimus*, 16-III-2011, Corley. Previously recorded at the end of summer only, from three localities in western Algarve (CORLEY, 2005; HUEMER & KARSHOLT, 2010).

*Caryocolum mucronatella* (Chrétien, 1900)

BA: Covão do Boi, larvae on *Minuartia recurva*, 24-VI-2010, Corley.

\* *Caryocolum fraternella* (Douglas, 1851)

M: Podre, 26-VI-2011, Corley & Merckx. Western and northern Europe from Spain to Estonia and Finland, absent from a few countries. [Larva on *Cerastium* and *Stellaria*].

\* *Caryocolum tricolorella* (Haworth, 1812)

TM: Parâmio, larvae on *Stellaria holostea*, 22-III-2011, Corley. Middle latitudes of Europe, north to central Fennoscandia and south to Spain and Romania.

*Caryocolum fibigerium* Huemer, 1988

TM: Parâmio, larvae on *Arenaria montana*, 22-III-2011, Corley. CORLEY (2002a) reported larvae on this foodplant in November in Algarve, which pupated before the end of the year. Evidently the phenology is different in Trás-os-Montes.

*Stomopteryx basalis* Staudinger, 1876

Second Portuguese record. TM: Brunheda, 21-VII-2006, Corley. Previously recorded from Algarve (CORLEY *et al.*, 2000).

*Dichomeris limbipunctella* (Staudinger, 1859)

ALG: São Miguel, larva on *Cistus albidus*, 13-III-2011, Corley.

*Helcystogramma triannulella* (Herrich-Schäffer, 1854)

TM: Vilarinho das Azenhas, larvae on *Calystegia sepium*, 12-IX-2006, Corley.

ZYGAENIDAE

*Zygaena lavandulae* (Esper, 1783)

TM: Colado, larva on *Dorycnium pentaphyllum*, 22-III-2011, Corley.

SESIIDAE

*Bembecia iberica* Špatenka, 1992

Fourth and subsequent Portuguese records: BA: Poio do Judeu, 23-VI-2002 and Mondeguinho, 18-VI-2005, larvae on *Lotus corniculatus*, A. & Z. Laštůvka; AAL: Cabeção, 24-VI-2002, A. & Z. Laštůvka; E: Serro Ventoso, 20-VI-2005 and São Bento, 12-VI-2010, larvae on *Anthyllis vulneraria*, A. & Z. Laštůvka. Previously recorded from Estremadura (see CORLEY *et al.*, 2012), Algarve (CORLEY, 2005) and Beira Litoral (PIRES & CORLEY, 2007).

CASTNIIDAE

\* *Paysandisia archon* (Burmeister, 1880)

ALG: Faro, larvae VI-2010, adult in coll. Cardoso; Praia da Luz, larvae in *Howea forsteriana*, 2011, T. Lambe (ANON, 2011). South American species accidentally introduced to Europe, now

established in Italy, France, Spain and in the Balearic Islands and Sicily. Larvae feed in the trunks of various genera of palms, causing much damage.

## TORTRICIDAE

*Phtheochroa simoniana* (Staudinger, 1859)

Northward extension of range. TM: Amieiro, 19-III-2011, Corley; DL: Parque Biológico de Gaia, 23-III-2011, Corley. Previous most northerly record from Douro Litoral (PIRES & CORLEY, 2007).

*Phalonidia manniana* (Fischer von Röslerstamm, 1839)

Fourth Portuguese record. TM: Gondesende, 30-VII-2011, Corley. Previously recorded from Alto Alentejo (CORLEY *et al.*, 2006), Beira Litoral (PIRES & CORLEY, 2007) and from Algarve (CORLEY *et al.*, 2008).

\* *Acleris literana* (Linnaeus, 1758)

M: Podre, 17-IX-2011, Van der Auwermeulen, in coll. Corley. Most of Europe, absent from the far north and south including Greece and some Mediterranean islands. [Larva on *Quercus robur*].

*Lozotaeniodes cupressana* (Duponchel, 1836)

BAL: Monte Velho, larvae on *Juniperus phoenicea*, 18-III-2011, Corley. Previously only recorded in Algarve (MONTEIRO & CARVALHO, 1984; CORLEY *et al.*, 2000).

*Lozotaeniodes formosana* (Frölich, 1830)

Fourth Portuguese record. BA: Serra da Marofa, 27-VIII-2011, Marabuto & Moreira. Previously recorded from Serra da Estrela (CORLEY, 2002b) and two localities in Trás-os-Montes (CORLEY *et al.*, 2012).

\* *Lobesia porrectana* (Zeller, 1847)

ALG: Lagoa da Nave, 22-IV-1992, Corley. Spain, France, Corsica, Sardinia, Sicily and Malta. Larva unknown.

*Epinotia nisella* (Clerck, 1759)

Second and third Portuguese records. TM: Moimenta, 24-IX-2005, Corley; Prado Novo, 1-VIII-2011, Corley. Previously recorded from Douro Litoral (CORLEY *et al.*, 2006).

\* *Eucosma hohenwartiana* (Denis & Schiffermüller, 1775)

M: Costa da Cabrita, flying by day, 28-VII-2011, Corley. Middle latitudes of Europe, north to central Fennoscandia and south to Spain and Romania. [Larva in stems of *Centaurea nigra*].

*Eucosma urbana* (Kennel, 1901)

Second Portuguese record. TM: Gondesende, 30-VII-2011, Corley. Previously recorded from Serra da Estrela (CORLEY *et al.*, 2011).

*Ancylis diminutana* (Haworth, 1811)

Third Portuguese record. M: Bertandos, 7-VIII-2011, Corley. Previously recorded from Beira Alta (RAGONOT, 1881) and Beira Litoral (PIRES & CORLEY, 2007).

## PYRALIDAE

*Cathayia insularum* (Speidel & Schmitz, 1991)

Fourth Portuguese locality. ALG: Cabanas Velhas, 13-VI-2011, Van der Auwermeulen, det.

Corley. Previously recorded from Algarve and Estremadura (CORLEY *et al.*, 2011; CORLEY *et al.*, 2012).

*Aglossa brabanti* Ragonot, 1884

Third to fifth Portuguese records. AAL: Galegos, 16-IX-1995, Corley; BB: Almaceda, 5-VIII-2011, Pires, det. Corley; ALG: Malhada da Figueira, 11-VIII-2011, Montegriffo, det. Corley. Previously recorded from two localities in Algarve (CORLEY *et al.*, 2000).

*Stemmatophora syriacalis oranalís* (Zerny, 1914)

Fourth Portuguese record. ALG: Malhada da Figueira, 12-VIII-2011, Montegriffo, det. Corley from photo. Previously recorded from Trás-os-Montes, Beira Baixa and Baixo Alentejo (CORLEY *et al.*, 2009).

*Hypsopygia fulvociliaris* (Duponchel, 1839)

Second Portuguese record. TM: Gondesende, 30-VII-2011, Corley. Previously recorded from Beira Baixa (MENDES, 1904).

\* *Selagia argyrella* (Denis & Schiffermüller, 1775) (Fig. 2)

TM: Gondesende, 30-VII-2011, Corley, det. Slamka. Middle Europe north to southern Sweden, rare in the south and absent from Mediterranean islands except Crete. [Larva on *Calluna*, *Helianthemum* and *Potentilla*].

*Moitrelia obductella* (Zeller, 1839)

Fourth and fifth Portuguese records. AAL: Serra da Chugueira, larva on *Mentha suaveolens*, 12-IV-1997, Corley; TM: Gondesende, 30-VII-2012, Corley. Previously recorded from Beira Baixa (MENDES, 1904) and Algarve (CORLEY *et al.*, 2000; CORLEY, 2005).

*Trachycera advenella* (Zincken, 1818)

Second Portuguese record. TM: Gondesende, 30-VII-2011, Corley. Previously recorded from Beira Litoral (PIRES & CORLEY, 2007).

*Trachycera marmorea* (Haworth, 1811)

Third and subsequent Portuguese records. AAL: Galegos, 3-VI-1996, Corley; TM: Gondesende, 18-VI-2010, Corley; Abreiro Station, 21-VI-2012, Corley; ALG: Boliqueime, 6-V-2011, Dale. Previously recorded from Beira Baixa (MENDES, 1904) and Setúbal (VIEILLEDENT, 1905).

*Acrobasis porphyrella* (Duponchel, 1836)

TM: Larvae on *Erica arborea*, Lamas de Olo, 24-V-2003, Corley and Pires, and Barragem da Serra Serrada, 22-III-2011, Corley.

*Asartodes monspesulalis* (Duponchel, 1834)

Third and fourth Portuguese localities. DL: Singeverga, VI-1971, Monteiro; M: 5 km south of Campo do Gerês, 9-V-1966, Hendriksen, specimen in ZMUC, (comm. E. Palm). Previously recorded from TM: Vila Real (RAGONOT, 1881) and BA: Serra da Estrela (MENDES, 1904 and subsequent records).

\* *Nyctegretis ruminella* La Harpe, 1860

ALG: Cruzinha, 21-IV-2011, 12-V-2011, Van der Auwermeulen, det. Corley. Spain, France, Western Mediterranean islands, Romania, Bulgaria. [Larva unknown].

*Pseudacrobasis nankingella* Roesler, 1975 (Fig. 3)

Second Portuguese record. AAL: Serra de Portel, 5-IX-2011, Marabuto and Ivo Rodrigues. Previously recorded from Algarve (CORLEY *et al.*, 2000).

## CRAMBIDAE

*Eudonia lacustrata* (Panzer, 1804)

Third and subsequent Portuguese records. AAL: Minhota, 5-VI-1996, Corley; TM: Montouto, 28-VII-2001, van Nieukerken, det. Corley; BA: Caldas de Manteigas, 17-VII-2007, Corley. Previously recorded from Beira Baixa (MENDES, 1904) and Estremadura (MENDES, 1910a).

*Eudonia phaeoleuca* (Zeller, 1846)

Third to fifth Portuguese localities. TM: Montalegre, VIII-1958, Monteiro, det. Corley, in coll. Monteiro; Lama Grande, 31-VII-2011, Corley; BA: Poço do Inferno, 23-VI-2010, Corley. Previously recorded from Serra da Estrela and Serra do Alvão (CORLEY *et al.*, 2006).

\* *Eudonia pallida* (Curtis, 1827)

TM: Gondesende, 30-VII-2011, Corley. Middle latitudes of Europe, north to central Fennoscandia and south to Spain and Romania. [Larva on moss, recorded on *Calliergonella* and *Pleurozium*].

Delete *Evergestis sophialis* (Fabricius, 1787)

Record from BA: Gaia, 25-IV-1997, Goater (CORLEY *et al.*, 2006) is based on two specimens of *E. frumentalis* in ZMUC (comm. O. Karsholt). There are no other Portuguese records.

*Cornifrons ulceratalis* (Lederer, 1858) (Fig. 4)

Third Portuguese record. E: Campo Grande, Lisboa, 17-XI-2011, Marabuto. A known wind-dispersed species from semi-arid North Africa (DANTART *et al.*, 2009). Previously recorded twice from the Algarve (CORLEY *et al.*, 2000).

*Achyra nudalis* (Hübner, 1796)

Extension of range. BB: Almaceda, 5-VIII-2011, Pires, det. Corley. Previously recorded from Estremadura (VIEILLEDENT, 1905) and Algarve (MONTEIRO & CARVALHO, 1984; CARVALHO & CORLEY, 1995).

*Anania terrealis* (Treitschke, 1829)

BA: Cântaro Raso, larvae on *Solidago virgaurea*, 3-VIII-2011, Corley.

*Mecyna auralis* (Peyerimhoff, 1872)

Fourth Portuguese record. TM: Gondesende, 30-VII-2011, Corley. Previously recorded from Serra da Estrela (CORLEY *et al.*, 2011).

## LASIOCAMPIDAE

*Lasiocampa trifolii* (Denis & Schiffermüller, 1775)

ALG: Sapais de Castro Marim, larvae on *Limoniastrum monopetalum*, 12-III-2011, Corley.

*Streblote panda* Hübner, 1820

ALG: Forte de Belixe, larva on *Pistacia lentiscus*, 14-III-2011, Corley.

## DREPANIDAE

*Cymatophorina diluta* (Denis & Schiffermüller, 1775)

Second and subsequent Portuguese records. AAL: Escusa, 21-X-1997, Corley; TM: Serra do Larouco, 23-IX-2003, Corley, Marabuto and Pires; Fresulfe, 23-IX-2005, Corley; DL: Carvalho de Rei,

19-IX-2004, Corley; E: Cortinas, 27-VIII-2011, Carlos Franquinho, det. Marabuto. Previously recorded from the Lisboa area (MENDES, 1910b).

## GEOMETRIDAE

*Isturgia murinaria* (Denis & Schiffermüller, 1775)

Third and fourth Portuguese records. TM: Gondesende, 30-VII-2011, Corley; Lama Grande, 31-VII-2011, Corley. Previously recorded from Douro Litoral and Trás-os-Montes (CRUZ & GONÇALVES, 1966).

*Apocheima hispidaria* (Denis & Schiffermüller, 1775)

Third and fourth Portuguese records. TM: Gondesende, 21-III-2011, Corley; Ponte de Parâmio, 22-III-2011, Corley and Maravalhas. Previously recorded from two localities in Trás-os-Montes (CORLEY *et al.*, 2006).

*Charissa avilarius* (Reisser, 1936)

Second and third Portuguese localities, BA: Cântaro Raso, at car headlights, 13-VII-2009, Corley; TM: Lama Grande, 31-VII-2011, Corley. Previously recorded from Serra da Estrela (CORLEY, 2002b).

*Alsophila aescularia* (Denis & Schiffermüller, 1775)

Second Portuguese locality. TM: Ponte de Parâmio, larva on *Crataegus*, 3-VI-2005, Corley, Marabuto and Pires; adult, 22-III-2011, Corley and Maravalhas. Previously recorded from Alto Douro (CRUZ & GONÇALVES, 1974).

(\*) *Cyclophora pendularia* (Clerck, 1759)

M: Bertandos, 7-VIII-2011, Corley. CRUZ & WATTISON (1935) recorded *C. orbicularia* (Hübner, 1799) from Douro Litoral. This name has a confused history having been widely applied to both *C. pendularia* and *C. albipunctata* (Hufnagel, 1767), which also occurs in northern Portugal. Unfortunately the specimen (IZPC) has been destroyed by insects, so the record could refer to either species. Middle latitudes of Europe, north to central Fennoscandia and south to Spain and Bulgaria. [Larva on *Salix caprea*, *S. viminalis* and *S. fragilis*].

*Idaea rubraria* (Staudinger, 1901)

Third and subsequent records. BAL: Minhota, 2-IX-2001, Corley; BA: Trinta, by R. Mondego, 5-IX-2001, Corley; 28-VIII-2011, Marabuto, Moreira and Romão; TM: Gondesende, 31-VII-2011, Corley; Prado Novo, 1-VIII-2011, Corley. Previously recorded from Minho (CRUZ & GONÇALVES, 1966) and Beira Alta (CRUZ & GONÇALVES, 1974).

*Anthometra plumularia* (Boisduval, 1840)

Extensions of range. TM: Montalegre, VIII-1958, Monteiro (Monteiro collection; Serra da Nogueira, 8-VII-2011, Marabuto; AAL: Minhota, netted by day, 3-VI-1997, Corley; BA: Covão do Boi, netted at dusk, 3-VIII-2011, Pires; E: Bezerra, 7-VII-2011, Marabuto; BL: Monteteso, 7-VII-2011, Marabuto. Previously recorded from Beira Litoral (STAUDINGER, 1881), Beira Baixa (MENDES, 1903) and Trás-os-Montes (CRUZ & GONÇALVES, 1974).

Delete *Xanthorhoe montanata* (Denis & Schiffermüller, 1775)

Early indications suggest that this species does not occur in the Iberian Peninsula, being replaced by the following species, see below.

\* *Xanthorhoe iberica* (Staudinger, 1901)

BA: Covão da Ametade, 19-VII-2007, Corley; TM: Lama Grande, 9-VII-2007, Corley.



EXPOSITO-HERMOSA & VIIDALEPP (2011) have shown that this neglected taxon is distinct from *X. montanata*. Other Portuguese material needs to be re-examined. Spain. [Larva unknown].

(\*) *Catarhoe rubidata* (Denis & Schiffermüller, 1775)

BL: Ceira, 16-V-2006, Pires. Previously recorded from Beira Alta and Estremadura by CRUZ & GONÇALVES (1966), but the specimens (IZPC) have been destroyed by insects, and the records were rejected by CORLEY (2008). Middle latitudes of Europe, absent from southernmost parts including all Mediterranean islands. [Larva on various *Galium* species].

*Entephria caeruleata* (Guenée, 1858) (Fig. 5)

Second Portuguese record. BA: Covão do Boi, 3-VIII-2011, Corley and Pires. Mattozo Santos (SANTOS, 1884) recorded *E. infidaria* (La Harpe, 1853) from Serra da Estrela, at the same time indicating that there was confusion between *infidaria*, *caeruleata* and *flavicinctata* (Hübner, 1813). Later this record was interpreted as referring to *E. caeruleata* by ZERKOWITZ (1946). Zerkowitz's decision was probably correct as *E. infidaria* is not known elsewhere in the Iberian Peninsula. The present finding is confirmation of *E. caeruleata*.

*Larentia clavaria* (Haworth, 1809)

AAL: Serra de Castelo de Vide, larvae on *Malva cretica*, 20-IV-2000, Corley.

*Earophila badiata* (Denis & Schiffermüller, 1775)

Third Portuguese record. TM: Gondesende, 20-III-2011, Corley. Previously recorded from two other sites near Bragança (CORLEY *et al.*, 2006).

\* *Dysstroma citrata* (Linnaeus, 1761)

M: Cabeças, 22-V-2011, Merckx, conf. Corley, in coll. Corley. Most of Europe but restricted to higher mountains in the south and absent from Mediterranean islands. [Larva polyphagous on trees, shrubs and some herbaceous plants including *Salix*, *Betula*, *Vaccinium* and *Fragaria*].

*Hydriomena ruberata* (Freyer, 1831)

Second Portuguese record. TM: Lamas de Olo, 23-V-2003, Corley, Maravalhas and Pires. Previously recorded from Douro Litoral (CRUZ & WATTISON, 1931).

*Eupithecia tenuiata* (Hübner, 1813)

Second and third Portuguese records. TM: Ponte de Parâmio, 6-IX-2002, Corley; Lama Grande, 31-VII-2011, Corley. Previously recorded from Serra da Estrela (CORLEY, 2002b).

*Eupithecia icterata* (Villers, 1789)

Fourth Portuguese record. BA: Trinta by river Mondego, 28-VIII-2011, Marabuto, Moreira and Romão. Previously recorded from three localities in Trás-os-Montes (CORLEY *et al.*, 2006; CORLEY *et al.*, 2011).

## NOCTUIDAE

\* *Acronicta alni* (Linnaeus, 1767)

DL: Lidador, larva, V-1978, Maravalhas; TM: Ponte de Castrelos, 26-V-2006, Marabuto. Middle latitudes of Europe north to central Fennoscandia, rare in the south and absent from Greece and Mediterranean islands except Corsica. [Larva polyphagous on deciduous trees].

*Cryphia lusitanica* (Draudt, 1931) (Fig. 6)

Second Portuguese record. BA: Serra da Marofa, 27-VIII-2011, Marabuto, Moreira and Romão.



Described as a form of *C. algae* from 'Lusitania' without locality, this was raised to species rank by FIBIGER *et al.* (2009). It had not been refound in Portugal until now.

*Bryophila raptricula* (Denis & Schiffermüller, 1775)

Fourth Portuguese locality. BB: Castelo Novo, 29-VIII-2011, Marabuto, Moreira and Romão. Previously recorded from Beira Baixa (MENDES, 1903), Minho (CRUZ & WATTISON, 1935) and from Alto Douro (CRUZ & GONÇALVES, 1974).

*Zethes insularis* (Rambur, 1833)

Extension of range. BAL: Ribeira de Limas, 9-IV-2011, Marabuto, Cortes and Romão. Previously recorded from Alto Douro (CRUZ & GONÇALVES, 1966, 1974) and from Algarve (CORLEY *et al.*, 2000).

\*\* *Chrysodeixis acuta* (Walker, 1858)

R: Assentiz, 24-IX-1990, Cardoso, conf. Corley. A species of the Old World tropics and subtropics, extending to the Canary Islands and Madeira. In Europe it is a scarce migrant with a number of records from England and one from France. [Larva polyphagous].

*Abrostola triplasia* (Linnaeus, 1758)

Southward extension of range. ALG: Cruzinha, 12-III-2011, Van der Auwermeulen. Not previously recorded south of Setúbal.

*Amphipyra tetra* (Fabricius, 1787)

Second Portuguese record. BA: Ponte de Cabaços, 2-VIII-2012, Corley. Previously recorded from another locality in Serra da Estrela (CORLEY, 2002b).

*Dypterygia scabriuscula* (Linnaeus, 1758)

Third Portuguese locality. TM: Gondesende, 30-VII-2011, Corley. Previously recorded from two localities in Minho (MENDES, 1909; CRUZ & WATTISON, 1929; CARVALHO, 1986).

\* *Brachylomia viminalis* (Fabricius, 1776)

M: Castro Laboreiro, 21-VII-2011, Merckx, det. Corley; TM: Lama Grande, at wine rope, 31-VII-2011, Corley. All Europe except the southernmost parts, absent from Mediterranean islands. [Larva on various *Salix* species].

*Conistra vaccinii* (Linnaeus, 1761)

Second confirmed Portuguese locality. BL: Mata do Buçaco, 14-XII-2011, Moreira and Pires. Previously recorded from Ribatejo (CRUZ, 1967) and Douro Litoral (CRUZ & WATTISON, 1935) and from Beira Litoral (PIRES & CORLEY, 2007). The Ribatejo records are correct but the Douro Litoral records are misidentifications of *C. ligula* (Esper, 1791). There are no specimens supporting the Beira Litoral records.

*Conistra erythrocephala* (Denis & Schiffermüller, 1775)

Second Portuguese record. TM: Gondesende, 20-III-2011, Corley. Previously recorded from the same site in November 2009 (see CORLEY *et al.*, 2012, where the earlier record of this species is discussed).

(\*) *Episema glaucina* (Esper, 1789)

TM: Carvalhelhos, 26-IX-1992, Maravalhas, conf. Corley. Previously recorded from Algarve (MONTEIRO & CARVALHO, 1984) and from several localities in Estremadura (VIEILLEDENT, 1905; MENDES, 1951; CARVALHO, 1978) but all specimens examined from these areas are *E.*

*grueneri* Boisduval, 1837. CORLEY (2008) rejected *E. glaucina* from the Portuguese list. Southern Europe, extending northwards to Germany and Czech Republic. [Larva on bulbs and leaves of Liliaceae, including *Muscari* and *Ornithogalum*].

*Lithophane ornitopus* (Hufnagel, 1866)

Second and subsequent Portuguese records. TM: Esculca, 23-III-1988, Maravalhas; Carvalhelhos, 2-XI-1988, Maravalhas; Gondesende, 20-III-2011, Corley; BA: Valado, 1-IV-1983, Maravalhas. Previously recorded elsewhere in Trás-os-Montes (MONTEIRO & MARAVALHAS, 1987).

*Lithophane furcifera* (Hufnagel, 1766)

Second Portuguese record. TM: Esculca, 2-XI-1988, Maravalhas. Previously recorded from the Alto Douro area in Trás-os-Montes (CRUZ & GONÇALVES, 1966).

(\*) *Apamea scolopacina* (Esper, 1788)

M: Portela, 25-VII-2011, Merckx, conf. Corley, in coll. Corley. Middle latitudes of Europe north to central Fennoscandia, rare in the south and absent from Greece and Mediterranean islands. [Larva on various grasses, *Carex* and *Luzula*].

\* *Oligia versicolor* (Borkhausen, 1792)

M: Barreiro, 9-VII-2011, Merckx, det. Corley, male genitalia preparation in coll. Corley. Middle latitudes of Europe, rare in the south and absent from parts of the Balkan peninsula and some Mediterranean islands. [Larva on grasses, *Carex* and *Luzula*].

*Mesapamea secalella* Remm, 1983

Second Portuguese record. BA: Ponte de Cabaços, at wine rope, 2-VIII-2011, Corley. Previously recorded from Baixo Alentejo (CORLEY *et al.*, 2006).

\* *Photedes minima* (Haworth, 1809)

M: Portela, 29-VI-2011, Merckx, det. Corley, in coll. Corley. Middle latitudes of Europe, north to central Fennoscandia and south to Spain and Bulgaria. [Larva on *Deschampsia caespitosa*].

(\*) *Melanchra persicariae* (Linnaeus, 1761)

M: Portela do Homem, 15-VII-2004, Barbut; Castro Laboreiro, 21-VII-2011, Merckx. Earlier records are questionable. Recorded from DL: Vizela and Riba de Ave (CRUZ & WATTISON, 1935) but there are no specimens in IZPC. There is also an unconfirmed record from Ribatejo (CARVALHO, 1980). Nearly all Europe except far north and south, absent from Greece and Sicily. [Larva polyphagous on herbaceous plants, also on *Salix*, *Sambucus* and *Larix*].

(\*) *Ceramica pisi* (Linnaeus, 1758)

M: Rodeiro, 13-VI-2011, Merckx. The species was listed for Coimbra in BAPTISTA (1789), but with no subsequent records from any part of Portugal until now, it is reasonable to suppose that the record was a misidentification of some other species. All Europe except southernmost parts, absent from Mediterranean islands. [Larva highly polyphagous on herbaceous plants, shrubs and occasionally on trees].

*Mythimna impura* (Hübner, 1808)

Extension of range. BA: Ponte de Cabaços, 2-VIII-2011 Corley. Previously recorded from Trás-os-Montes (MONTEIRO & MARAVALHAS, 1987; CORLEY *et al.*, 2006).

*Lycophotia molothina* (Esper, 1789)

Southward extension of range. ALG: Foia, 13-V-2011, Van der Auwermeulen, conf. Corley. Previous records are from Beira Litoral and Beira Alta northwards.

(\*) *Anorthoa munda* (Denis & Schiffermüller, 1775)

TM: Gondesende, at wine ropes, 20-III-2011, Corley. All specimens seen were ab. *immaculata* Staudinger. Earlier records are unreliable (CORLEY, 2008; CORLEY *in prep.*). Nearly all Europe except most northerly parts, and absent from southern parts of Balkan peninsula and Mediterranean islands. [Larva polyphagous on trees].

\* *Chersotis oreina* Dufay, 1984 (Fig. 7)

TM: Lama Grande, 31-VII-2011, Corley. Restricted distribution in west European mountains from south-western Alps of Switzerland, through central France, Pyrenees and northern Spain to Sierra Nevada. [Larva unknown].

\* *Epipsilia latens* (Hübner, 1809) (Fig. 8)

BA: Covão do Boi, 13-VII-2009, Corley; 3-VIII-2011, Corley, Moreira, Pires and Romão. Mountains of Europe from North Spain through the Alps, Tatra and Carpathians into Russia and the Balkan countries. [Larva on herbaceous plants].

\* *Euxoa eruta* (Hübner, 1817)

M: Ramisqueira, 8-VII-2011, Merckx, det. Corley; BA: Ponte de Cabaços, 2-VIII-2012, Corley. Distribution poorly known through confusion with related species, but probably in most of middle and southern Europe. [Larva on various herbaceous plants].

*Euxoa oranaria* (A. Bang-Haas, 1906)

Second Portuguese locality. ALG: Ilha da Culatra, 30-V-2000, Cardoso. Previously recorded in Algarve (CARVALHO & CORLEY, 1995).

*Agrotis alexandriensis* Bethune-Baker, 1894

Second Portuguese record. ALG: Ilha da Culatra, 20-VIII-2007, Cardoso, det. Marabuto. Previously recorded in Algarve (CORLEY, 2008).

## ARCTIIDAE

*Arctia caja* (Linnaeus, 1758)

Additional Portuguese records. BA: Caldas de Manteigas, 6-IX-2001, Corley; Quinta da Volta, larva on *Rubus*, 27-V-2004, Corley; BL: Panchorra, 26-VIII-2011, Marabuto, Moreira, Romão and Franquinho; TM: Montalegre, Monteiro (MONTEIRO, 1959a). Previously recorded by VANDELLI (1797) without locality, by CRUZ & GONÇALVES (1955), based on an unlocalised specimen presumed from Minho in coll. T. Monteiro and by CARVALHO (1976) from Beira Alta.

## Recent literature affecting the Portuguese Lepidoptera fauna list

CORLEY *et al.* (2012) add 28 species to the Portuguese fauna and delete four.

GAEDIKE (2011) describes a new species, *Infurcitinea corleyi* from Portugal.

LAŠTŮVKA & LAŠTŮVKA (2011) add *Stigmella rhamnophila* (Amsel, 1935) and three species of Gracillariidae (*Caloptilia loriolella* (Frey, 1881), *Phyllonorycter kUSDasi* (Deschka, 1970) and *P. triflorella* (Peyerimhoff, 1872) to the Portuguese fauna.

SCHMID (2011) finds that Iberian records of *Teleiopsis bagriotella* belong to a new species *T. lindae* Schmid, 2011 with Portuguese holotype.

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